FOX Matrix 14400

Modular Fiber Optic Matrix Switcher from 16x16 to 144x144

Shown with optional I/O boards

DESCRIPTION

The Extron **FOX Matrix 14400** is a high performance, modular fiber optic matrix switcher for complete, end-to-end digital AV signal transmission and routing over fiber optic cable. The matrix switcher is expandable from 16x16 to 144x144, and is fully compatible with FOX Series transmitters and receivers. It features very high-speed, all-digital switching of pixel-perfect standard definition video, high resolution computer-video, HDMI, DVI, and multi-rate SDI. Equipped with integration-friendly features common to Extron matrix switchers, together with hot-swappable I/O boards and fan, real-time system monitoring, and redundant, hot-swappable power supplies, the FOX Matrix 14400 delivers highly reliable, enterprise-wide switching of fiber optic AV and control signals for mission-critical environments.

FEATURES

- I/O sizes from 16x16 to 144x144
- Compatible with all FOX Series transmitters and receivers
- SpeedSwitch™ Technology provides exceptional switching speed for HDCP-encrypted content
- Multimode and singlemode I/O boards available
- Modular, field-upgradeable and hot-swappable design
- Dual redundant and hot-swappable power supplies
- Low power consumption for efficient cooling, lower costs, and longer life
- Advanced computer-aided diagnostics
- Input fiber link detection
- Status LED indicators for fiber link status
- Alarm notification for fiber link loss
- Two AC power inputs
- Selectable output reclocking
- Industry standard LC connectors provide reliable physical connectivity and precise fiber core alignment
- Global presets
- Rooming
- Ethernet monitoring and control
- RS-232 and RS-422 control port
- Front panel configuration port
- Rack-mountable 8U, full rack width metal enclosure

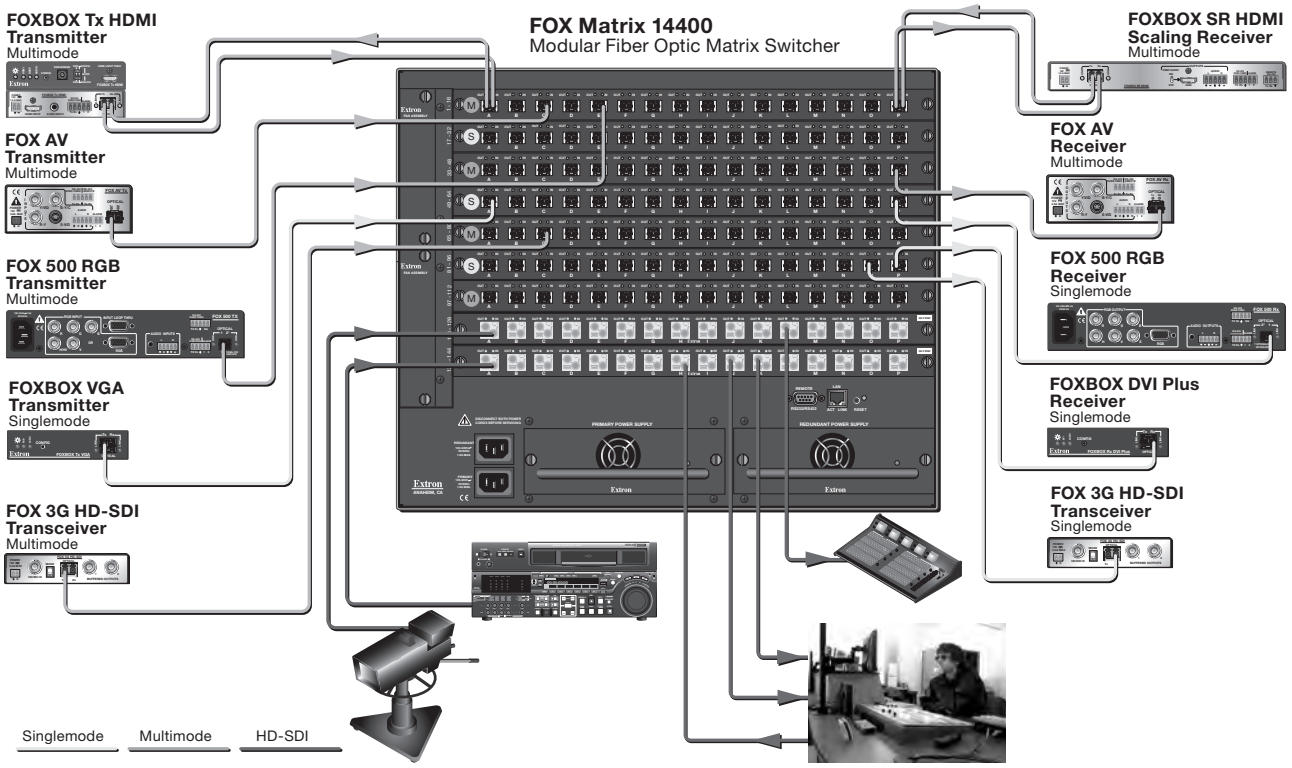
SPECIFICATIONS

NOTE: The I/O cards are class 1 laser products. They meet the safety regulations of IEC-60825, FDA 21 CFR 1040.10, and FDA 21 CFR 1040.11.

OPTICAL SPECIFICATIONS	
Number/type	16 singlemode or 16 multimode fiber optic inputs and outputs (16 Tx and 16 Rx) per I/O board
Operating distance	
Singlemode	30 km (18.75 miles) with singlemode (SM) cables with an Extron singlemode distribution amplifier or transmitter/receiver
Multimode	300 m (985') with 62.5 µm multimode (MM) cables with an Extron multimode Tx/Rx unit 1 km (3280') with 50 µm multimode (MM) cables with an Extron multimode Tx/Rx unit 2 km (6561') with 50 µm, 2000 MHz bandwidth, laser-optimized multimode (MM) cables with an Extron multimode Tx/Rx unit
Nominal peak wavelength	850 nm for multimode (MM), 1310 nm for singlemode (SM)
Transmission power	
Singlemode	-5 dBm, typical
Multimode	-5 dBm, typical
Maximum receiver sensitivity	
Singlemode	-18 dBm, typical
Multimode	-12 dBm, typical
Optical loss budget	
Singlemode	13 dB, maximum
Multimode	7 dB, maximum
Maximum channel data rate	4.25 Gbps
VIDEO	
Routing	16 x 16 up to 144 x 144 unidirectional (Tx) matrix or 8 x 8 up to 72 x 72 bidirectional (Tx/Rx) matrix
VIDEO/AUDIO INPUT	
Number/signal type	16 to 144 fiber optic signals
Connectors	16 LC connectors per I/O board
VIDEO/AUDIO OUTPUT	
Number/signal type	16 to 144 fiber optic signals
Connectors	16 LC connectors per I/O board
GENERAL	
Power*	2 (positive-negative), 100 VAC to 240 VAC, 50-60 Hz; internal, 400 watts each *A redundant power supply is standard.
NOTE: All wattages are measured at 115 VAC, 60 Hz and 240 VAC, 50 Hz. **Enclosure without boards: 50 watts** **Enclosure fully loaded with 9 singlemode boards: 167 watts** **Enclosure fully loaded with 9 multimode boards: 149 watts** **Each singlemode board: 13 watts** **Each multimode board: 11 watts**	
Thermal dissipation, full load	
115 VAC, 60 Hz	Dual power supplies: 569.8 BTU/hr
240 VAC, 50 Hz	Dual power supplies: 573.2 BTU/hr
Enclosure type	Metal
Product weight (fully loaded)	69.1 lbs (31.3 kg)

For complete specifications, please go to www.extron.com

MODEL	VERSION DESCRIPTION	PART #
FOX Matrix 14400 Frame	FOX Matrix 14400 Frame	60-1255-01
FOX I/O 1616 MM	16x16 I/O Board - Multimode	70-771-21
FOX I/O 1616 SM	16x16 I/O Board - Singlemode	70-771-22
FOX 3G I/O 1616 SM P	16x16 I/O Board - Singlemode, Path Comp	70-965-01
FOX I/O 1616 HD-SDI	16x16 I/O Board - Multi-Rate SDI	70-966-01
FOX Matrix Blank Plate	Blank Plate - Single I/O Slot	70-651-21


FOXBOX Tx HDMI
Transmitter
Multimode
FOX AV
Transmitter
Multimode
FOX 500 RGB
Transmitter
Multimode
FOXBOX VGA
Transmitter
Singlemode
FOX 3G HD-SDI
Transceiver
Multimode
FOX Matrix 14400
Modular Fiber Optic Matrix Switcher
FOXBOX SR HDMI
Scaling Receiver
Multimode
FOX AV
Receiver
Multimode
FOX 500 RGB
Receiver
Singlemode
FOXBOX DVI Plus
Receiver
Singlemode
FOX 3G HD-SDI
Transceiver
Singlemode
Singlemode
Multimode
HD-SDI